

What is claimed is:

1. A method of reducing the incidence of web breakage in web printing or reducing the incidence of sheet jamming in sheetfed printing , comprising steps of:
 - 5 (a) printing the web or sheets with a printing unit having adjacent, rotating ink rollers, said ink rollers having a central print area and terminal non-print areas, by applying ink to a first ink roller of an upper ink train of ink rollers, the ink being transferred to the print areas and non-print areas of successive adjacent ink rollers and finally printed in an image on the web or sheet substrate;
 - 10 (b) delivering a sufficient amount of a tack-reducing solvent at a pre-determined rate to the non-print areas of a member selected from the group consisting of a plate cylinder of the upper ink train, a blanket cylinder of the upper ink train, or an ink roller of the upper ink train, so that the tack-reducing solvent is transferred to non-print areas of successive adjacent ink rollers and cylinders
 - 15 reduce the incidence of web breakage or sheet jamming.
2. A method according to claim 1, wherein step (b) is carried out by delivering the tack-reducing solvent to a second ink roller of the upper ink train.
- 20 3. A method according to claim 1, wherein the pre-determined rate of step (b) is adjusted according to the printing rate.

4. A method according to claim 1, wherein in step (b) from 1 to about 5 drops per minute of the tack-reducing solvent is delivered.
5. A method according to claim 1, comprising the further steps of:
- 5 (c) replacing the paper substrate of step (a) with a second paper substrate having a narrower width;
- (d) increasing amount of the tack-reducing solvent delivered in the non-print areas.
- 10 6. A method according to claim 1, wherein a solvent line carries the tack-reducing solvent from a reservoir of the tack-reducing solvent and the tack-reducing solvent passes through an aperture in the solvent line onto the non-print areas.
- 15 7. A method according to claim 6, comprising further steps of:
- (c) replacing the paper substrate of step (a) with a second paper substrate having a narrower width;
- (d) closing the aperture in the solvent line and opening a second aperture in the solvent line for solvent to pass onto the non-print areas closer to the edges of
- 20 the second paper substrate.

8. A method according to claim 1, wherein the tack-reducing solvent is delivered at a rate that does not wash out print at edges of the printing and at a rate that prevents ink build up in non-print areas.

5 9. A method according to claim 1, wherein the printing is carried out by a method selected from the group consisting of lithographic printing, flexographic printing, letterpress printing, rotogravure printing, and sheetfed printing.

10 10. A method according to claim 1, wherein the paper substrate is a super calendered paper.

11. A method of reducing incidence of web breakage when printing super calendered paper in a lithographic printing process, comprising a step of delivering to non-print areas of the ink train a solvent that is a tack-reducing
15 solvent for the printing ink, wherein the solvent is delivered at a pre-determined rate sufficient to reduce incidence of web breakage.

12. A method according to claim 11, wherein the rate of solvent delivery is dropwise.

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13. A method according to claim 11, wherein from one to five drops of solvent are delivered each minute.

14. A printing apparatus for web printing or sheetfed printing, comprising:
at least one printing unit having adjacent ink rollers, said ink rollers having
terminal non-print areas, and

a solvent delivery system for delivering a tack-reducing solvent at an adjustable
5 rate to the non-print areas of at least one ink roller such that the incidence
of web breakage or sheet jamming is reduced and such that print at the
edges of print areas is not washed out.

15. A printing apparatus according to claim 14, wherein said solvent delivery
10 system comprises a solvent line for moving the solvent to the non-print
areas of the at least one ink roller and apertures in the solvent line to
deliver the solvent to said non-print areas.

16. A printing apparatus according to claim 15, wherein the solvent delivery
15 system further comprises a reservoir for containing the solvent, from which
reservoir the solvent line receives the solvent.

17. A printing apparatus according to claim 16, wherein the solvent delivery
system comprises a pump for pumping the solvent from the reservoir.

18. A printing apparatus according to claim 17, wherein the solvent delivery
20 system further comprises a controller for adjusting the rate of delivery of
solvent to the non-print area.

19. A printing apparatus according to claim 15, wherein the solvent line has at least two spaced apertures that can be opened and closed each end of said at least one ink roller.